



**ANNUAL REPORT**

<b>Drinking-Water System Number:</b>	<b>260061958</b>
<b>Drinking-Water System Name:</b>	West Shore Treatment and Distribution
<b>Drinking-Water System Owner:</b>	The Corporation of the Township of Severn
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2019 to December 31, 2019

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Township of Severn Administrative Office 1024 Hurlwood Lane Severn, Ontario L3V 0Y6</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b> <input type="text"/></p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b> <input type="text"/></p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></p>
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**Note: For the following tables below, additional rows or columns may be added, or an appendix may be attached to the report**

**List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:**

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
West Shore Beach Club Distribution System	260095641

**Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water? Yes [X] No [ ]**



Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method \_\_\_\_\_

**Describe your Drinking-Water System**

Water for the West Shore water treatment plant is pumped from Lake Couchiching, via three low lift pumps located at 3491 Hedgemere Landing, to a package water treatment plant located at 3333 New Brailey Line. The treatment plant consists of a conventional two-train coagulation, flocculation, sedimentation and filtration plant. Filtered water flows through granular activated carbon tanks for taste and odor removal before being disinfected by ultraviolet light and sodium hypochlorite. Water is then stored in a 1,910 m<sup>3</sup> concrete underground reservoir. Backwash water from the filters is sent directly to the sanitary sewage system. Three high lift pumps provide water to the distribution system. The distribution system was constructed in 2005 and consists of PVC water main with PE service piping. There are 12 sample stations, 127 fire hydrants and 7 private hydrants connected to the distribution system. The West Shore system services approximately 800 residential and commercial properties as well as supplying water to 86 homes in the West Shore Beach Club.

**List all water treatment chemicals used over this reporting period**

Sodium Hypochlorite  
 Alum  
 ClearFloc AP1065 polymer

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Please provide a brief description and a breakdown of monetary expenses incurred**

Replacement of BCA PLC -\$23,797  
 Replacement of Low Lift PLC -\$13,600  
 PLC Processor-\$6900



**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
Feb. 4, 2019	Primary Disinfection Loss/Secondary Operational	N/A	N/A	Sampled clear wells	Feb. 11,2019
Sept.16, 2019	Pressure loss to 66 homes for new water main connection	1.54	mg/L	Sampled 24hrs apart	Sept.19, 2019

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	52	0 – 1	0 – 560	N/A	N/A
Treated	52	0 – 0	0 – 0	52	0 – 60
Distribution	162	0 – 0	0 – 0	52	0 – 2

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity – Train 1	8760	0.03 – 0.12 NTU
Turbidity – Train 2	8760	0.03 – 0.17 NTU
Turbidity	8760	0.03 – 0.15 NTU
Chlorine	8760	1.17 – 1.87
Chlorine Free Residual Distribution System	365	0.71 – 1.91
Fluoride (If the DWS provides fluoridation)	N/A	N/A

***NOTE:** For continuous monitors use 8760 as the number of samples.*

***NOTE:** Record the unit of measure if it is **not** milligrams per litre.*

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				



**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	October 29, 2019	0.15	µg/L	No
Arsenic	October 29, 2019	0.4	µg/L	No
Barium	October 29, 2019	22.6	µg/L	No
Boron	October 29, 2019	21	µg/L	No
Cadmium	October 29, 2019	0.003	µg/L	No
Chromium	October 29, 2019	0.16	µg/L	No
*Lead	Jan 23-July 31, 2019	0.02-0.24	µg/L	No
Mercury	October 29, 2019	0.01	µg/L	No
Selenium	October 29, 2019	0.06	µg/L	No
Sodium	October 29, 2019	32.6	mg/L	Yes
Uranium	October 2, 2017	0.020	µg/L	No
Fluoride	October 26, 2015	<0.06	mg/L	No
Nitrite	January 9, 2018 April 16, 2018 July 16, 2018 October 15, 2018	<0.003 <0.003 <0.003 <0.003	mg/L	No
Nitrate	January 9, 2018 April 16, 2018 July 16, 2018 October 15, 2018	0.066 0.163 0.068 0.050	mg/L	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

**Summary of lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing			
Distribution	4	0.02 – 0.24	0

\*Note: Lead sample results are from the Westshore Beach Club Distribution System DWS# 260095641\*

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	October 29, 2019	0.02	µg/L	No
Atrazine + N-dealkylated metabolites	October 29, 2019	0.01	µg/L	No
Azinphos-methyl	October 29, 2019	0.05	µg/L	No
Benzene	October 29, 2019	0.32	µg/L	No



<b>Benzo(a)pyrene</b>	October 29, 2019	0.004	µg/L	No
<b>Bromoxynil</b>	October 29, 2019	0.33	µg/L	No
<b>Carbaryl</b>	October 29, 2019	0.05	µg/L	No
<b>Carbofuran</b>	October 29, 2019	0.01	µg/L	No
<b>Carbon Tetrachloride</b>	October 29, 2019	0.17	µg/L	No
<b>Chlorpyrifos</b>	October 29, 2019	0.02	µg/L	No
<b>Diazinon</b>	October 29, 2019	0.02	µg/L	No
<b>Dicamba</b>	October 29, 2019	0.20	µg/L	No
<b>1,2-Dichlorobenzene</b>	October 29, 2019	0.41	µg/L	No
<b>1,4-Dichlorobenzene</b>	October 29, 2019	0.36	µg/L	No
<b>1,2-Dichloroethane</b>	October 29, 2019	0.35	µg/L	No
<b>1,1-Dichloroethylene (vinylidene chloride)</b>	October 29, 2019	0.33	µg/L	No
<b>Dichloromethane</b>	October 29, 2019	0.35	µg/L	No
<b>2-4 Dichlorophenol</b>	October 29, 2019	0.15	µg/L	No
<b>2,4-Dichlorophenoxy acetic acid (2,4-D)</b>	October 29, 2019	0.19	µg/L	No
<b>Diclofop-methyl</b>	October 29, 2019	0.40	µg/L	No
<b>Dimethoate</b>	October 29, 2019	0.06	µg/L	No
<b>Diquat</b>	October 29, 2019	<1	µg/L	No
<b>Diuron</b>	October 29, 2019	0.03	µg/L	No
<b>Glyphosate</b>	October 29, 2019	<1	µg/L	No
<b>Haloacetic Acids (HAA5) (NOTE: show latest annual average)</b>	2019 Average	27.07	µg/L	No
<b>Malathion</b>	October 29, 2019	0.02	µg/L	No
<b>MCPA</b>	October 29, 2019	0.00012	mg/L	No
<b>Metolachlor</b>	October 29, 2019	0.01	µg/L	No
<b>Metribuzin</b>	October 29, 2019	0.02	µg/L	No
<b>Monochlorobenzene</b>	October 29, 2019	0.3	ug/L	No
<b>Paraquat</b>	October 29, 2019	<1	µg/L	No
<b>Pentachlorophenol</b>	October 29, 2019	0.15	µg/L	No
<b>Phorate</b>	October 29, 2019	0.01	µg/L	No
<b>Picloram</b>	October 29, 2019	<1	µg/L	No
<b>Polychlorinated Biphenyls(PCB)</b>	October 29, 2019	0.04	µg/L	No
<b>Prometryne</b>	October 29, 2019	0.03	µg/L	No
<b>Simazine</b>	October 29, 2019	0.01	µg/L	No
<b>THM (NOTE: show latest annual average)</b>	2019 Average	41.5	µg/L	No
<b>Terbufos</b>	October 29, 2019	0.01	µg/L	No
<b>Tetrachloroethylene</b>	October 29, 2019	0.35	µg/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	October 29, 2019	0.20	µg/L	No
<b>Triallate</b>	October 29, 2019	0.01	µg/L	No
<b>Trichloroethylene</b>	October 29, 2019	0.44	µg/L	No
<b>2,4,6-Trichlorophenol</b>	October 29, 2019	0.25	µg/L	No
<b>Trifluralin</b>	October 29, 2019	0.02	µg/L	No
<b>Vinyl Chloride</b>	October 29, 2019	0.17	µg/L	No

**List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
Sodium	32.6	mg/L	October 29, 2019